ABSTRACT

A reception weight calculation section 203 calculates reception weights W_1 and W_2 every antenna using an optimal directional control method in order to improve interference cancellation effect, an arrival direction estimation section 204 estimates a direction of arrive of a received signal for each antenna to calculate steering vectors S_1 and S_2 for each antenna, and a replica weight calculation section 211 calculates replica weights W_{r1} and W_{r2} using the reception weights W_1, W_2 and steering vectors S_1, S_2.